

HCV Genome and Recombinant Proteins

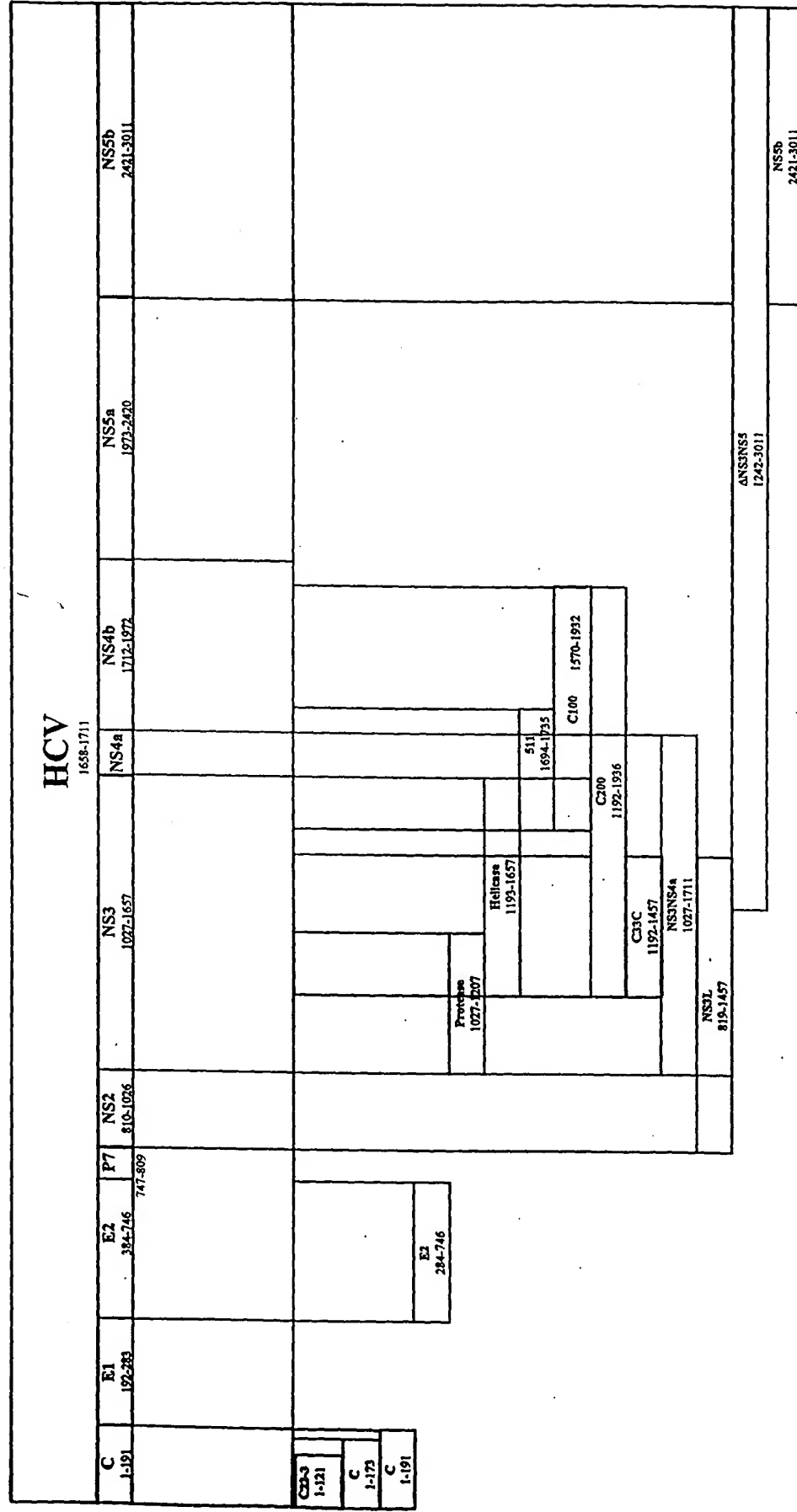


FIG. 1

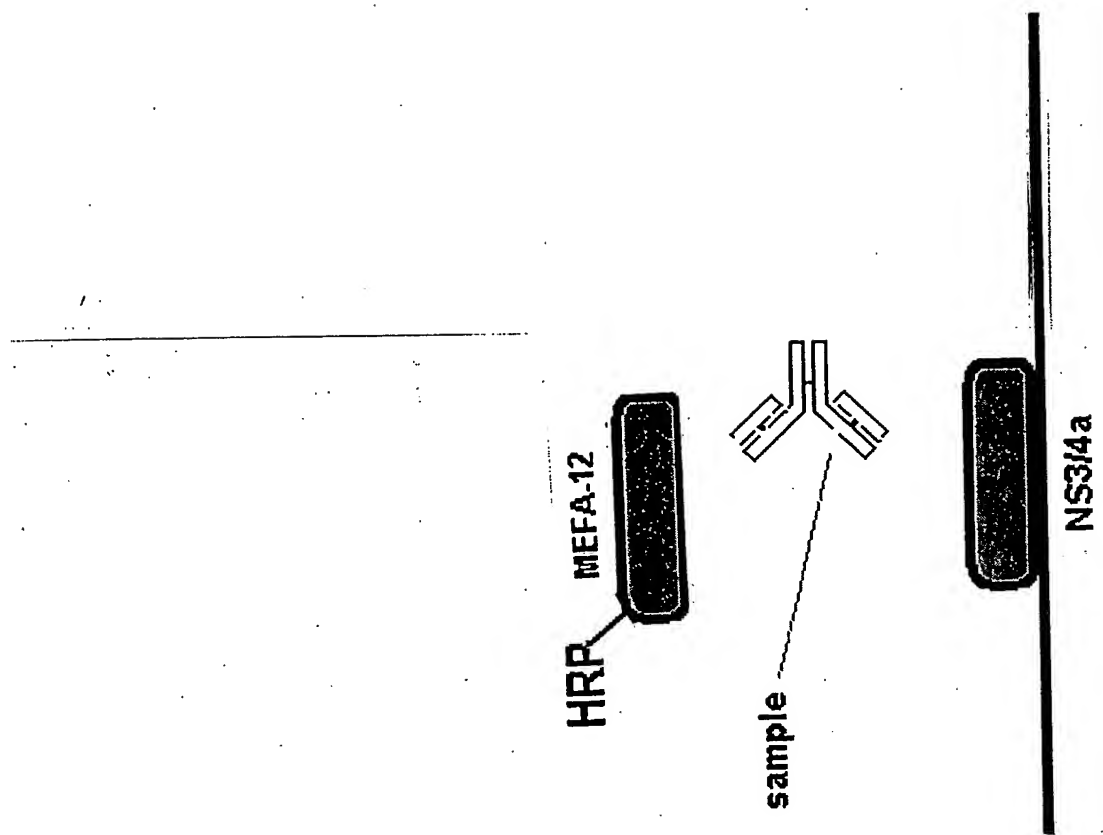


FIG. 2

200
 P P V V P Q S F Q V A H L H A
 CCA CCA GTA GTG CCC CAG AGC TTC CAG GTG GCT CAC CTC CAT GCT

210 220
 P T G S G K S T K V P A A Y A
 CCC ACA GGC AGC GGC AAA AGC ACC AAG GTC CCG GCT GCA TAT GCA

230
 A Q G Y K V L V L N P S V A A
 GCT CAG GGC TAT AAG GTG CTA GTA CTC AAC CCC TCT GTT GCT GCA

240 250
 T L G F G A Y M S K A H G I D
 ACA CTG GGC TTT GGT GCT TAC ATG TCC AAG GCT CAT GGG ATC GAT

260
 P N I R T G V R T I T T G S P
 CCT AAC ATC AGG ACC GGG GTG AGA ACA ATT ACC ACT GGC AGC CCC

270 280
 I T Y S T Y G K F L A D G G C
 ATC ACG TAC TCC ACC TAC GGC AAG TTC CTT GCC GAC GGC GGG TGC

290
 S G G A Y D I I I C D E C H S
 TCG GGG GGC GCT TAT GAC ATA ATA ATT TGT GAC GAG TGC CAC TCC

300 310
 T D A T S I L G I G T V L D Q
 ACG GAT GCC ACA TCC ATC TTG GGC ATT GGC ACT GTC CTT GAC CAA

320
 A E T A G A R L V V L A T A T
 GCA GAG ACT GCG GGG GCG AGA CTG GTT GTG CTC GCC ACC GCC ACC

330 340
 P P G S V T V P H P N I E E V
 CCT CCG GGC TCC GTC ACT GTG CCC CAT CCC AAC ATC GAG GAG GTT

350
 A L S T T G E I P F Y G K A I
 GCT CTG TCC ACC ACC GGA GAG ATC CCT TTT TAC GGC AAG GCT ATC

360 370
 P L E V I K G G R H L I F C H
 CCC CTC GAA GTA ATC AAG GGG GGG AGA CAT CTC ATC TTC TGT CAT

380
 S K K K C D E L A A K L V A L
 TCA AAG AAG AAG TGC GAC GAA CTC GCC GCA AAG CTG GTC GCA TTG

FIG. 3B

390 400
 G I N A V A Y Y R G L D V S V
 GGC ATC AAT GCC GTG GCC TAC TAC CGC GGT CTT GAC GTG TCC GTC

410
 I P P I G D V V V V A T D A L
 ATC CCG CCC ATC GGC GAT GTT GTC GTC GTG GCA ACC GAT GCC CTC

420 430
 M T G Y T G D F D S V I D C N
 ATG ACC GGC TAT ACC GGC GAC TTC GAC TCG GTG ATA GAC TGC AAT

440
 T C V T Q T V D F S L D P T F
 ACG TGT GTC ACC CAG ACA GTC GAT TTC AGC CTT GAC CCT ACC TTC

450 460
 T I E T I T L P Q D A V S R T
 ACC ATT GAG ACA ATC ACG CTC CCC CAA GAT GCT GTC TCC CGC ACT

470
 Q R R G R T G R G K P G I Y R
 CAA CGT CGG GGC AGG ACT GGC AGG GGG AAG CCA GGC ATC TAC AGA

480 490
 F V A P G E R P S G M F D S S
 TTT GTG GCA CCG GGG GAG CGC CCC TCC GGC ATG TTC GAC TCG TCC

500
 V L C E C Y D A G C A W Y E L
 GTC CTC TGT GAG TGC TAT GAC GCA GGC TGT GCT TGG TAT GAG CTC

510 520
 T P A E T T V R L R A Y M N T
 ACG CCC GCC GAG ACT ACA GTT AGG CTA CGA GCG TAC ATG AAC ACC

530
 P G L P V C Q D H L E F W E G
 CCG GGG CTT CCC GTG TGC CAG GAC CAT CTT GAA TTT TGG GAG GGC

540 550
 V F T G L T H I D A H F L S Q
 GTC TTT ACA GGC CTC ACT CAT ATA GAT GCC CAC TTT CTA TCC CAG

560
 T K Q S G E N L P Y L V A Y Q
 ACA AAG CAG AGT GGG GAG AAC CTT CCT TAC CTG GTA GCG TAC CAA

570 580
 A T V C A R A Q A P P P S W D
 GCC ACC GTG TGC GCT AGG GCT CAA GCC CCT CCC CCA TCG TGG GAC

FIG. 3C

590
 Q M W K C L I R L K P T L H G
 CAG ATG TGG AAG TGT TTG ATT CGC CTC AAG CCC ACC CTC CAT GGG

600 610
 P T P L L Y R L G A V Q N E I
 CCA ACA CCC CTG CTA TAC AGA CTG GGC GCT GTT CAG AAT GAA ATC

620
 T L T H P V T K Y I M T C M S
 ACC CTG ACG CAC CCA GTC ACC AAA TAC ATC ATG ACA TGC ATG TCG

630 640
 A D L E V V T S T W V L V G G
 GCC GAC CTG GAG GTC GTC ACG AGC ACC TGG GTG CTC GTT GGC GGC

650
 V L A A L A A Y C L S T G C V
 GTC CTG GCT GCT TTG GCC GCG TAT TGC CTG TCA ACA GGC TGC GTG

660 670
 V I V G R V V L S G K P A I I
 GTC ATA GTG GGC AGG GTC GTC TTG TCC GGG AAG CCG GCA ATC ATA

680
 P D R E V L Y R E F D E M E E
 CCT GAC AGG GAA GTC CTC TAC CGA GAG TTC GAT GAG ATG GAA GAG

686
 C
 TGC

FIG. 3D

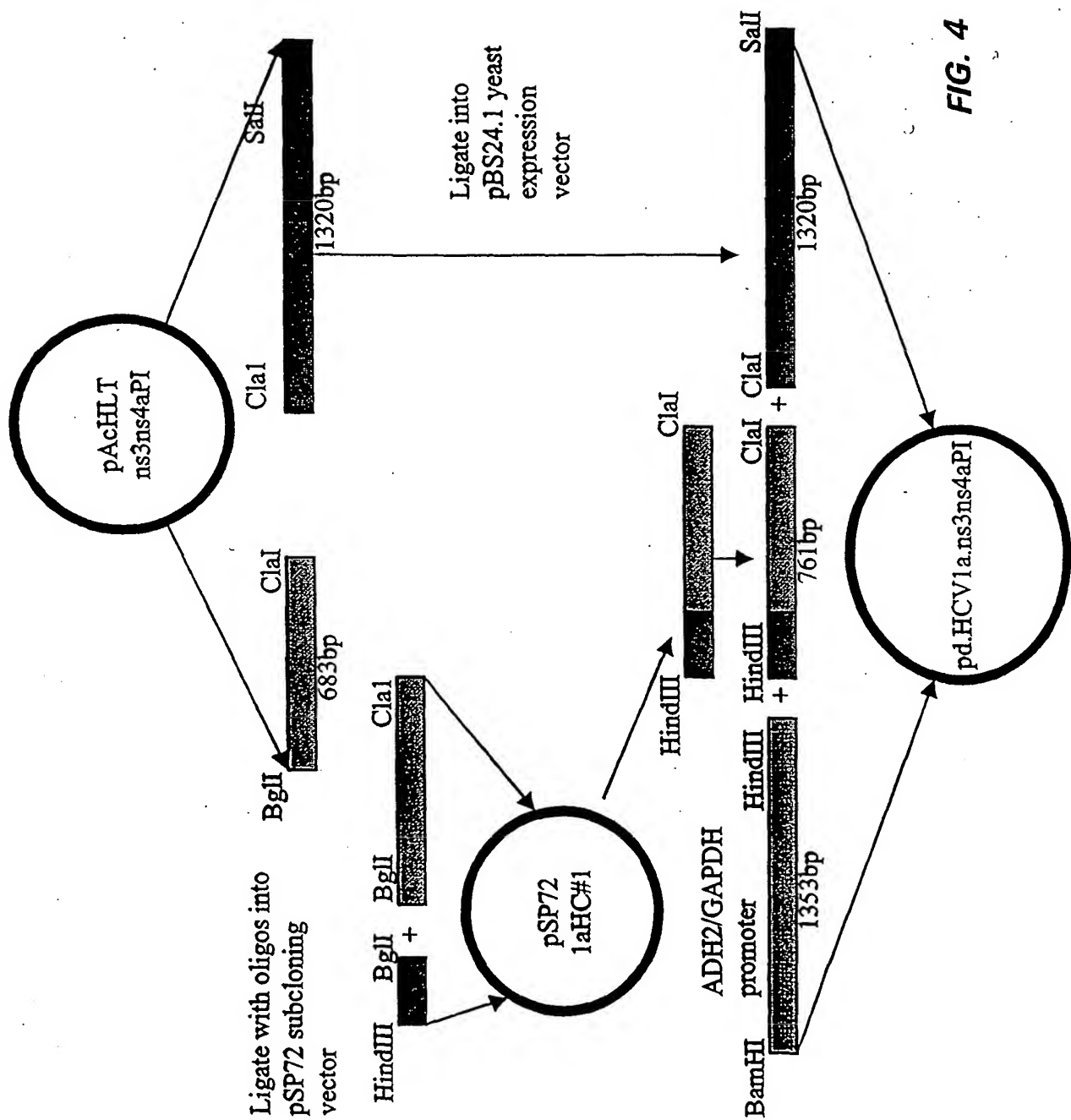


FIG. 4

MEFA 12 Antigen Construct

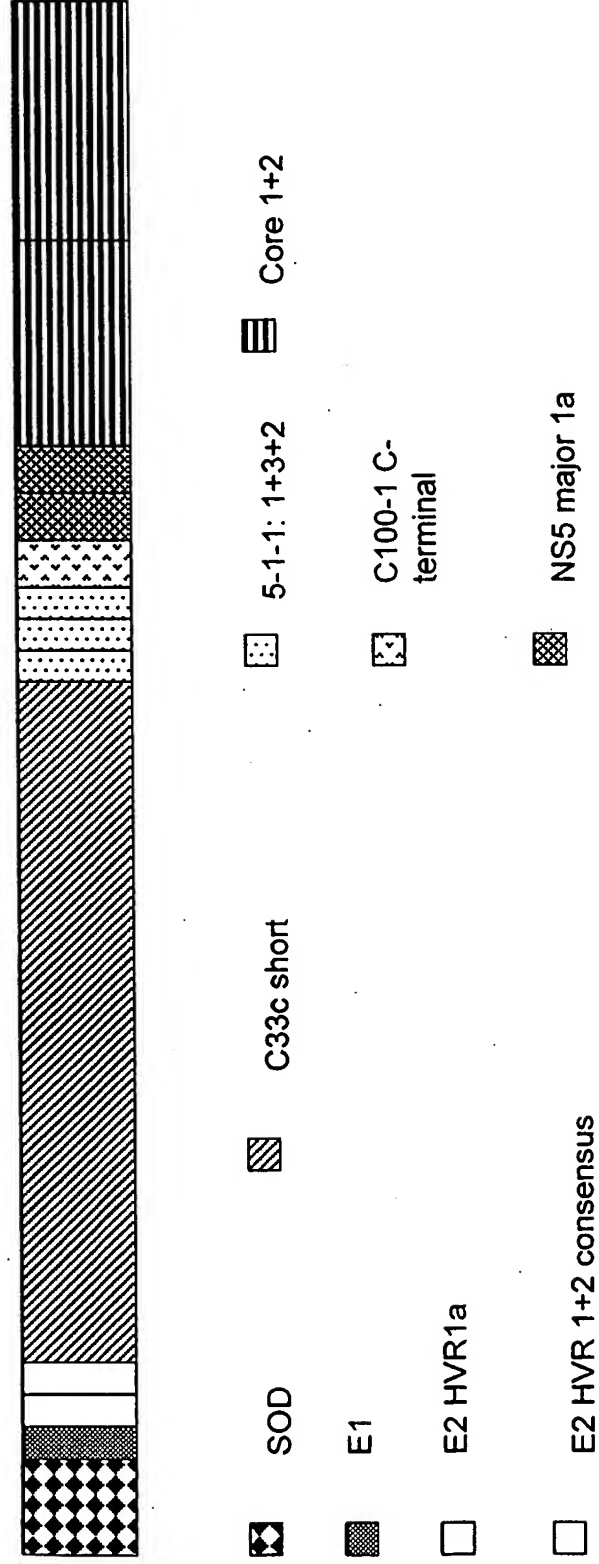


FIG. 5

1									10								
M	A	T	K	A	V	C	V	L	K	G	D	G	P	V			
ATG	GCT	ACA	AAG	GCT	GTT	TGT	GTT	TTG	AAG	GGT	GAC	GGC	CCA	GTT	45		
				20											30		
Q	G	I	I	N	F	E	Q	K	E	S	N	G	P	V			
CAA	GGT	ATT	ATT	AAC	TTC	GAG	CAG	AAG	GAA	AGT	AAT	GGA	CCA	GTG	90		
									40								
K	V	W	G	S	I	K	G	L	T	E	G	L	H	G			
AAG	GTG	TGG	GGA	AGC	ATT	AAA	GGA	CTG	ACT	GAA	GGC	CTG	CAT	GGA	135		
				50											60		
F	H	V	H	E	F	G	D	N	T	A	G	C	T	S			
TTC	CAT	GTT	CAT	GAG	TTT	GGA	GAT	AAT	ACA	GCA	GGC	TGT	ACC	AGT	180		
									70								
A	G	P	H	F	N	P	L	S	T	R	G	C	N	C			
GCA	GGT	CCT	CAC	TTT	AAT	CCT	CTA	TCC	ACG	CGT	GGT	TGC	AAT	TGC	225		
				80											90		
S	I	Y	P	G	H	I	T	G	H	R	M	A	W	K			
TCT	ATC	TAT	CCC	GGC	CAT	ATA	ACG	GGT	CAC	CGC	ATG	GCA	TGG	AAG	270		
									100								
L	G	S	A	A	R	T	T	S	G	F	V	S	L	F			
CTT	GGT	TCC	GCC	GCC	AGA	ACT	ACC	TCG	GGC	TTT	GTC	TCC	TTG	TTC	315		
				110											120		
A	P	G	A	K	Q	N	E	T	H	V	T	G	G	A			
GCC	CCA	GGT	GCC	AAA	CAA	AAC	GAA	ACT	CAC	GTC	ACG	GGA	GGC	GCA	360		
									130								
A	A	R	T	T	S	G	L	T	S	L	F	S	P	G			
GCC	GCC	CGA	ACT	ACG	TCT	GGG	TTG	ACC	TCT	TTG	TTC	TCC	CCA	GGT	405		

FIG. 6A

														140															150		
A	S	Q	N	I	Q	L	I	T	S	T	D	N	S	S																	
GCC	AGC	CAA	AAC	ATT	CAA	TTG	ATT	ACT	AGT	ACG	GAT	AAC	TCC	TCT	450																
														160																	
P	P	V	V	P	Q	S	F	Q	V	A	H	L	H	A																	
CCA	CCA	GTA	GTG	CCC	CAG	AGC	TTC	CAG	GTG	GCT	CAC	CTC	CAT	GCT	495																
														170															180		
P	T	G	S	G	K	S	T	K	V	P	A	A	Y	A																	
CCC	ACA	GGC	AGC	GGC	AAA	AGC	ACC	AAG	GTC	CCG	GCT	GCA	TAT	GCA	540																
														190																	
A	Q	G	Y	K	V	L	V	L	N	P	S	V	A	A																	
GCT	CAG	GGC	TAT	AAG	GTG	CTA	GTA	CTC	AAC	CCC	TCT	GTT	GCT	GCA	585																
														200															210		
T	L	G	F	G	A	Y	M	S	K	A	H	G	I	D																	
ACA	CTG	GGC	TTT	GGT	GCT	TAC	ATG	TCC	AAG	GCT	CAT	GGG	ATC	GAT	630																
														220																	
P	N	I	R	T	G	V	R	T	I	T	T	G	S	P																	
CCT	AAC	ATC	AGG	ACC	GGG	GTG	AGA	ACA	ATT	ACC	ACT	GGC	AGC	CCC	675																
														230															240		
I	T	Y	S	T	Y	G	K	F	L	A	D	G	G	C																	
ATC	ACG	TAC	TCC	ACC	TAC	GGC	AAG	TTC	CTT	GCC	GAC	GGC	GGG	TGC	720																
														250																	
S	G	G	A	Y	D	I	I	I	C	D	E	C	H	S																	
TCG	GGG	GGC	GCT	TAT	GAC	ATA	ATA	ATT	TGT	GAC	GAG	TGC	CAC	TCC	765																
														260															270		
T	D	A	T	S	I	L	G	I	G	T	V	L	D	Q																	
ACG	GAT	GCC	ACA	TCC	ATC	TTG	GGC	ATC	GGC	ACT	GTC	CTT	GAC	CAA	810																
														280																	
A	E	T	A	G	A	R	L	V	V	L	A	T	A	T																	
GCA	GAG	ACT	GCG	GGG	GCG	AGA	CTG	GTT	GTG	CTC	GCC	ACC	GCC	ACC	855																
														290															300		
P	P	G	S	V	T	V	P	H	P	N	I	E	E	V																	
CCT	CCG	GGC	TCC	GTC	ACT	GTG	CCC	CAT	CCC	AAC	ATC	GAG	GAG	GTT	900																

FIG. 6B

														310	
A	L	S	T	T	G	E	I	P	F	Y	G	K	A	I	
GCT	CTG	TCC	ACC	ACC	GGA	GAG	ATC	CCT	TTT	TAC	GGC	AAG	GCT	ATC	945
														320	330
P	L	E	V	I	K	G	G	R	H	L	I	F	C	H	
CCC	CTC	GAA	GTA	ATC	AAG	GGG	GGG	AGA	CAT	CTC	ATC	TTC	TGT	CAT	990
														340	
S	K	K	K	C	D	E	L	A	A	K	L	V	A	L	
TCA	AAG	AAG	AAG	TGC	GAC	GAA	CTC	GCC	GCA	AAG	CTG	GTC	GCA	TTG	1035
														350	360
G	I	N	A	V	A	Y	Y	R	G	L	D	V	S	V	
GGC	ATC	AAT	GCC	GTG	GCC	TAC	TAC	CGC	GGT	CTT	GAC	GTG	TCC	GTC	1080
														370	
I	P	T	S	G	D	V	V	V	V	A	T	D	A	L	
ATC	CCG	ACC	AGC	GGC	GAT	GTT	GTC	GTC	GTG	GCA	ACC	GAT	GCC	CTC	1125
														380	390
M	T	G	Y	T	G	D	F	D	S	V	I	D	C	N	
ATG	ACC	GGC	TAT	ACC	GGC	GAC	TTC	GAC	TCG	GTG	ATA	GAC	TGC	AAT	1170
														400	
T	C	A	C	S	G	K	P	A	I	I	P	D	R	E	
ACG	TGT	GCA	TGC	TCC	GGG	AAG	CCG	GCA	ATC	ATA	CCT	GAC	AGG	GAA	1215
														410	420
V	L	Y	R	E	F	D	E	M	E	E	C	S	Q	H	
GTC	CTC	TAC	CGA	GAG	TTC	GAT	GAG	ATG	GAA	GAG	TGC	TCT	CAG	CAC	1260
														430	
L	P	Y	I	E	Q	G	M	M	L	A	E	Q	F	K	
TTA	CCG	TAC	ATC	GAG	CAA	GGG	ATG	ATG	CTC	GCC	GAG	CAG	TTC	AAG	1305
														440	450
Q	K	A	L	G	L	S	R	G	G	K	P	A	I	V	
CAG	AAG	GCC	CTC	GGC	CTC	TCG	CGA	GGG	GGC	AAG	CCG	GCA	ATC	GTT	1350
														460	
P	D	K	E	V	L	Y	Q	Q	Y	D	E	M	E	E	
CCA	GAC	AAA	GAG	GTG	TTG	TAT	CAA	CAA	TAC	GAT	GAG	ATG	GAA	GAG	1395

FIG. 6C

640															
P	D	Y	N	P	P	L	V	E	T	W	K	K	P	D	
CCG	GAC	TAT	AAC	CCC	CCG	CTA	GTG	GAG	ACG	TGG	AAA	AAG	CCC	GAC	1935
650															660
Y	E	P	P	V	V	H	G	R	K	T	K	R	N	T	
TAC	GAA	CCA	CCT	GTG	GTC	CAT	GGC	AGA	AAG	ACC	AAA	CGT	AAC	ACC	1980
670															
N	R	R	P	Q	D	V	K	F	P	G	G	G	Q	I	
AAC	CGG	CGG	CCG	CAG	GAC	GTC	AAG	TTC	CCG	GGT	GGC	GGT	CAG	ATC	2025
680															690
V	G	G	V	Y	L	L	P	R	R	G	P	R	L	G	
GTT	GGT	GGA	GTT	TAC	TTG	TTG	CCG	CGC	AGG	GGC	CCT	AGA	TTG	GGT	2070
700															
V	L	A	T	R	K	T	S	P	I	P	K	A	R	R	
GTG	CTC	GCG	ACG	AGA	AAG	ACT	TCC	CCT	ATC	CCC	AAG	GCT	CGT	CGG	2115
710															720
P	E	G	R	T	W	A	Q	P	G	Y	P	W	P	L	
CCC	GAG	GGC	AGG	ACC	TGG	GCT	CAG	CCC	GGT	TAC	CCT	TGG	CCC	CTC	2160
730															
Y	G	N	K	D	R	R	S	T	G	K	S	W	G	K	
TAT	GGC	AAT	AAG	GAC	AGA	CGG	TCT	ACA	GGT	AAG	TCC	TGG	GGT	AAG	2205
740															750
P	G	Y	P	W	P	R	K	T	K	R	N	T	N	R	
CCA	GGG	TAC	CCT	TGG	CCA	AGA	AAG	ACC	AAA	CGT	AAC	ACC	AAC	CGG	2250
760															
R	P	Q	D	V	K	F	P	G	G	G	Q	I	V	G	
CGG	CCG	CAG	GAC	GTC	AAG	TTC	CCG	GGT	GGC	GGT	CAG	ATC	GTT	GGT	2295
770															780
G	V	Y	L	L	P	R	R	G	P	R	L	G	V	L	
GGA	GTT	TAC	TTG	TTG	CCG	CGC	AGG	GGC	CCT	AGA	TTG	GGT	GTG	CTC	2340
790															
A	T	R	K	T	S	P	I	P	K	A	R	R	P	E	
GCG	ACG	AGA	AAG	ACT	TCC	CCT	ATC	CCC	AAG	GCT	CGT	CGG	CCC	GAG	2385

FIG. 6E

				800											810	
G	R	T	W	A	Q	P	G	Y	P	W	P	L	Y	G		
GGC	AGG	ACC	TGG	GCT	CAG	CCC	GGT	TAC	CCT	TGG	CCC	CTC	TAT	GGC	2430	
									820							
N	K	D	R	R	S	T	G	K	S	W	G	K	P	G		
AAT	AAG	GAC	AGA	CGG	TCT	ACA	GGT	AAG	TCC	TGG	GGT	AAG	CCA	GGG	2475	
				829												
Y	P	W	P	OC												
TAC	CCT	TGG	CCC	TAA	TGAGTCGAC											

FIG. 6F

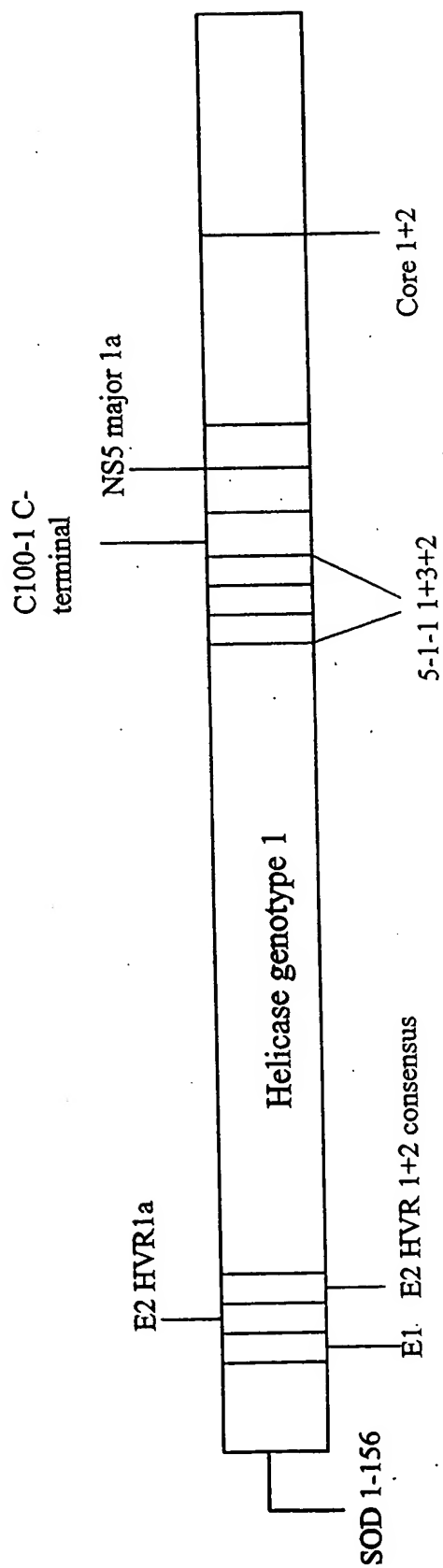


FIG. 7

1										10					
M	A	T	K	A	V	C	V	L	K	G	D	G	P	V	
ATG	GCT	ACA	AAG	GCT	GTT	TGT	GTT	TTG	AAG	GGT	GAC	GGC	CCA	GTT	
				20											30
Q	G	I	I	N	F	E	Q	K	E	S	N	G	P	V	
CAA	GGT	ATT	ATT	AAC	TTC	GAG	CAG	AAG	GAA	AGT	AAT	GGA	CCA	GTG	
									40						
K	V	W	G	S	I	K	G	L	T	E	G	L	H	G	
AAG	GTG	TGG	GGA	AGC	ATT	AAA	GGA	CTG	ACT	GAA	GGC	CTG	CAT	GGA	
				50											60
F	H	V	H	E	F	G	D	N	T	A	G	C	T	S	
TTC	CAT	GTT	CAT	GAG	TTT	GGA	GAT	AAT	ACA	GCA	GGC	TGT	ACC	AGT	
									70						
A	G	P	H	F	N	P	L	S	R	K	H	G	G	P	
GCA	GGT	CCT	CAC	TTT	AAT	CCT	CTA	TCC	AGA	AAA	CAC	GGT	GGG	CCA	
				80											90
K	D	E	E	R	H	V	G	D	L	G	N	V	T	A	
AAG	GAT	GAA	GAG	AGG	CAT	GTT	GGA	GAC	TTG	GGC	AAT	GTG	ACT	GCT	
									100						
D	K	D	G	V	A	D	V	S	I	E	D	S	V	I	
GAC	AAA	GAT	GGT	GTG	GCC	GAT	GTG	TCT	ATT	GAA	GAT	TCT	GTG	ATC	
				110											120
S	L	S	G	D	H	C	I	I	G	R	T	L	V	V	
TCA	CTC	TCA	GGA	GAC	CAT	TGC	ATC	ATT	GGC	CGC	ACA	CTG	GTG	GTC	
									130						
H	E	K	A	D	D	L	G	K	G	G	N	E	E	S	
CAT	GAA	AAA	GCA	GAT	GAC	TTG	GGC	AAA	GGT	GGA	AAT	GAA	GAA	AGT	
				140											150
T	K	T	G	N	A	G	S	R	L	A	C	G	V	I	
ACA	AAG	ACA	GGA	AAC	GCT	GGA	AGT	CGT	TTG	GCT	TGT	GGT	GTA	ATT	
									160						
G	I	A	Q	N	L	N	S	G	C	N	C	S	I	Y	
GGG	ATC	GCC	CAG	AAT	TTG	AAT	TCT	GGT	TGC	AAT	TGC	TCT	ATC	TAT	
				170											180
P	G	H	I	T	G	H	R	M	A	W	K	L	G	S	
CCC	GGC	CAT	ATA	ACG	GGT	CAC	CGC	ATG	GCA	TGG	AAG	CTT	GGT	TCC	
									190						
A	A	R	T	T	S	G	F	V	S	L	F	A	P	G	
GCC	GCC	AGA	ACT	ACC	TCG	GGC	TTT	GTC	TCC	TTG	TTC	GCC	CCA	GGT	

FIG. 8A

200 210
 A K Q N E T H V T G G A A A R
 GCC AAA CAA AAC GAA ACT CAC GTC ACG GGA GGC GCA GCC GCC CGA

220
 T T S G L T S L F S P G A S Q
 ACT ACG TCT GGG TTG ACC TCT TTG TTC TCC CCA GGT GCC AGC CAA

230 240
 N I Q L I V D F I P V E N L E
 AAC ATT CAA TTG ATT GTC GAC TTT ATC CCT GTG GAG AAC CTA GAG

250
 T T M R S P V F T D N S S P P
 ACA ACC ATG CGA TCT CCG GTG TTC ACG GAT AAC TCC TCT CCA CCA

260 270
 V V P Q S F Q V A H L H A P T
 GTA GTG CCC CAG AGC TTC CAG GTG GCT CAC CTC CAT GCT CCC ACA

280
 G S G K S T K V P A A Y A A Q
 GGC AGC GGC AAA AGC ACC AAG GTC CCG GCT GCA TAT GCA GCT CAG

290 300
 G Y K V L V L N P S V A A T L
 GGC TAT AAG GTG CTA GTA CTC AAC CCC TCT GTT GCT GCA ACA CTG

310
 G F G A Y M S K A H G I D P N
 GGC TTT GGT GCT TAC ATG TCC AAG GCT CAT GGG ATC GAT CCT AAC

320 330
 I R T G V R T I T T G S P I T
 ATC AGG ACC GGG GTG AGA ACA ATT ACC ACT GGC AGC CCC ATC ACG

340
 Y S T Y G K F L A D G G C S G
 TAC TCC ACC TAC GGC AAG TTC CTT GCC GAC GGC GGG TGC TCG GGG

350 360
 G A Y D I I I C D E C H S T D
 GGC GCT TAT GAC ATA ATA ATT TGT GAC GAG TGC CAC TCC ACG GAT

370
 A T S I L G I G T V L D Q A E
 GCC ACA TCC ATC TTG GGC ATT GGC ACT GTC CTT GAC CAA GCA GAG

380 390
 T A G A R L V V L A T A T P P
 ACT GCG GGG GCG AGA CTG GTT GTG CTC GCC ACC GCC ACC CCT CCG

400
 G S V T V P H P N I E E V A L
 GGC TCC GTC ACT GTG CCC CAT CCC AAC ATC GAG GAG GTT GCT CTG

410 420

FIG. 8B

S T T G E I P F Y G K A I P L
TCC ACC ACC GGA GAG ATC CCT TTT TAC GGC AAG GCT ATC CCC CTC

430
E V I K G G R H L I F C H S K
GAA GTA ATC AAG GGG GGG AGA CAT CTC ATC TTC TGT CAT TCA AAG

440 450
K K C D E L A A K L V A L G I
AAG AAG TGC GAC GAA CTC GCC GCA AAG CTG GTC GCA TTG GGC ATC

460
N A V A Y Y R G L D V S V I P
AAT GCC GTG GCC TAC TAC CGC GGT CTT GAC GTG TCC GTC ATC CCG

470 480
T S G D V V V V A T D A L M T
ACC AGC GGC GAT GTT GTC GTC GTG GCA ACC GAT GCC CTC ATG ACC

490
G Y T G D F D S V I D C N T C
GGC TAT ACC GGC GAC TTC GAC TCG GTG ATA GAC TGC AAT ACG TGT

500 510
V T Q T V D F S L D P T F T I
GTC ACC CAG ACA GTC GAT TTC AGC CTT GAC CCT ACC TTC ACC ATT

520
E T I T L P Q D A V S R T Q R
GAG ACA ATC ACG CTC CCC CAA GAT GCT GTC TCC CGC ACT CAA CGT

530 540
R G R T G R G K P G I Y R F V
CGG GGC AGG ACT GGC AGG GGG AAG CCA GGC ATC TAC AGA TTT GTG

550
A P G E R P S G M F D S S V L
GCA CCG GGG GAG CGC CCC TCC GGC ATG TTC GAC TCG TCC GTC CTC

560 570
C E C Y D A G C A W Y E L T P
TGT GAG TGC TAT GAC GCA GGC TGT GCT TGG TAT GAG CTC ACG CCC

580
A E T T V R L R A Y M N T P G
GCC GAG ACT ACA GTT AGG CTA CGA GCG TAC ATG AAC ACC CCG GGG

590 600
L P V C Q D H L E F W E G V F
CTT CCC GTG TGC CAG GAC CAT CTT GAA TTT TGG GAG GGC GTC TTT

610
T G L T H I D A H F L S Q T K
ACA GGC CTC ACT CAT ATA GAT GCC CAC TTT CTA TCC CAG ACA AAG

620 630
Q S G E N L P Y L V A Y Q A T

FIG. 8C

CAG AGT GGG GAG AAC CTT CCT TAC CTG GTA GCG TAC CAA GCC ACC

640

V C A R A Q A P P P S W D Q M
GTG TGC GCT AGG GCT CAA GCC CCT CCC CCA TCG TGG GAC CAG ATG

650

W K C L I R L K P T L H G P T
TGG AAG TGT TTG ATT CGC CTC AAG CCC ACC CTC CAT GGG CCA ACA

670

P L L Y R L G A V Q N E I T L
CCC CTG CTA TAC AGA CTG GGC GCT GTT CAG AAT GAA ATC ACC CTG

680

T H P V T K Y I M T C M S A D
ACG CAC CCA GTC ACC AAA TAC ATC ATG ACA TGC ATG TCG GCC GAC

700

L E V V T S A C S G K P A I I
CTG GAG GTC GTC ACG AGC GCA TGC TCC GGG AAG CCG GCA ATC ATA

710

P D R E V L Y R E F D E M E E
CCT GAC AGG GAA GTC CTC TAC CGA GAG TTC GAT GAG ATG GAA GAG

730

C S Q H L P Y I E Q G M M L A
TGC TCT CAG CAC TTA CCG TAC ATC GAG CAA GGG ATG ATG CTC GCC

740

E Q F K Q K A L G L S R G G K
GAG CAG TTC AAG CAG AAG GCC CTC GGC CTC TCG CGA GGG GGC AAG

760

P A I V P D K E V L Y Q Q Y D
CCG GCA ATC GTT CCA GAC AAA GAG GTG TTG TAT CAA CAA TAC GAT

770

E M E E C S Q A A P Y I E Q A
GAG ATG GAA GAG TGC TCA CAA GCT GCC CCA TAT ATC GAA CAA GCT

790

Q V I A H Q F K E K V L G L I
CAG GTA ATA GCT CAC CAG TTC AAG GAA AAA GTC CTT GGA TTG ATC

800

D N D Q V V V T P D K E I L Y
GAT AAT GAT CAA GTG GTT GTG ACT CCT GAC AAA GAA ATC TTA TAT

820

E A F D E M E E C A S K A A L
GAG GCC TTT GAT GAG ATG GAA GAA TGC GCC TCC AAA GCC GCC CTC

830

I E E G Q R M A E M L K S K I
ATT GAG GAA GGG CAG CGG ATG GCG GAG ATG CTC AAG TCT AAG ATA

840

FIG. 8D

850
 Q G L L G I L R R H V G P G E
 CAA GGC CTC CTC GGG ATA CTG CGC CGG CAC GTT GGT CCT GGC GAG

860 870
 G A V Q W M N R L I A F A S R
 GGG GCA GTG CAG TGG ATG AAC CGG CTG ATA GCC TTC GCC TCC AGA

880
 G N H V S P T H Y V P S R S R
 GGG AAC CAT GTT TCC CCC ACG CAC TAC GTT CCG TCT AGA TCC CGG

890 900
 R F A Q A L P V W A R P D Y N
 AGA TTC GCC CAG GCC CTG CCC GTT TGG GCG CGG CCG GAC TAT AAC

910
 P P L V E T W K K P D Y E P P
 CCC CCG CTA GTG GAG ACG TGG AAA AAG CCC GAC TAC GAA CCA CCT

920 930
 V V H G R S S R R F A Q A L P
 GTG GTC CAC GGC AGA TCT TCT CGG AGA TTC GCC CAG GCC CTG CCC

940
 V W A R P D Y N P P L V E T W
 GTT TGG GCG CGG CCG GAC TAT AAC CCC CCG CTA GTG GAG ACG TGG

950 960
 K K P D Y E P P V V H G R K T
 AAA AAG CCC GAC TAC GAA CCA CCT GTG GTC CAT GGC AGA AAG ACC

970
 K R N T N R R P Q D V K F P G
 AAA CGT AAC ACC AAC CGG CGG CCG CAG GAC GTC AAG TTC CCG GGT

980 990
 G G Q I V G R R G P P I P K A
 GGC GGT CAG ATC GTT GGT CGC AGG GGC CCT CCT ATC CCC AAG GCT

1000
 R R P E G R T W A Q P G Y P W
 CGT CGG CCC GAG GGC AGG ACC TGG GCT CAG CCC GGT TAC CCT TGG

1010 1020
 P L Y G N K D R R S T G K S W
 CCC CTC TAT GGC AAT AAG GAC AGA CGG TCT ACA GGT AAG TCC TGG

1030
 G K P G Y P W P R K T K R N T
 GGT AAG CCA GGG TAC CCT TGG CCA AGA AAG ACC AAA CGT AAC ACC

1040 1050
 N R R P Q D V K F P G G G Q I
 AAC CGA CGG CCG CAG GAC GTC AAG TTC CCG GGT GGC GGT CAG ATC

FIG. 8E

1060
 V G R R G P P I P K A R R P E
 GTT GGT CGC AGG GGC CCT CCT ATC CCC AAG GCT CGT CGG CCC GAG

1070 1080
 G R T W A Q P G Y P W P L Y G
 GGC AGG ACC TGG GCT CAG CCC GGT TAC CCT TGG CCC CTC TAT GGC

1090
 N K D R R S T G K S W G K P G
 AAT AAG GAC AGA CGG TCT ACC GGT AAG TCC TGG GGT AAG CCA GGG

1099
 Y P W P
 TAT CCT TGG CCC

FIG. 8F

MEFA-3 ANTIGEN

hSOD- (1-154)	CORE	CORE	c33c	5-1-1 type 1	5-1-1 type 3	5-1-1 type 2	C-100	C-100	NS5	NS5
10	10	1192	1694	1694	1694	1694	1901	1901	2278	2278
AMINO ACIDS	53	53	1457	1735	1735	1735	1940	1940	2310	2310

A

MEFA-5 ANTIGEN

hSOD- (1-154)	CORE	CORE	E1	E2	c33c	5-1-1 type 1	5-1-1 type 3	5-1-1 type 2	C-100	NS5	NS5
10	10	303	405	1192	1689	1689	1689	1689	1901	2278	2278
AMINO ACIDS	53	53	320	444	1457	1735	1735	1735	1940	2313	2313

B

MEFA-6 ANTIGEN

hSOD- (1-154)	E1	E2	c33c	5-1-1 type 1	5-1-1 type 3	5-1-1 type 2	C-100	NS5	NS5	CORE	CORE
303	303	405	1192	1689	1689	1689	1901	2278	2278	10	10
AMINO ACIDS	320	444	1457	1735	1735	1735	1940	2313	2313	53	53

C

FIG. 9